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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,694	09/30/2004	Hunter L. Reap	014862-000001	5693
24239	7590	04/06/2006	EXAMINER	
MOORE & VAN ALLEN PLLC P.O. BOX 13706 Research Triangle Park, NC 27709			DOE, GRACE SC	
			ART UNIT	PAPER NUMBER
			3732	

DATE MAILED: 04/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/711,694	<b>Applicant(s)</b> REAP, HUNTER L.	
	<b>Examiner</b> Grace SC Doe	<b>Art Unit</b> 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply.**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/28/05</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Information Disclosure Statement*

1. The references listed in Applicant's information disclosure statement filed on 1/28/05 is acknowledged and in compliance with 37 CFR 1.97 and 1.98.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regards to claim 1, the language "at all relative positions of the projection and the tooth" is vague. Please clarify.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Linet (US 2,634,501). Linet discloses a dental tool having a substantially planar base (See figure

5, part 23) capable of extending over adjacent teeth (See figure 10) and projection extending therefrom (See figure 3, part 17).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kochis (US 4,526,542) in view of Linet (2,634,501). Kochis discloses a dental tool having a substantially planar base (See figure 1, part 41) and projection extending therefrom (See figure 2, part 31). Kochis fails to indicate that the base is capable of extending over adjacent teeth. Linet discloses a base capable of extending over adjacent teeth (See figure 10) in order to enable parallel gauge measurements (See col. 1, lines 43-55; col. 2, lines 20-24). Therefore it would be obvious to one of ordinary skill in the art to modify the tool of Kochis with the base of Caldwell in order to enable parallel gauge measurements (See col. 1, lines 43-55; col. 2, lines 20-24). Kochis further discloses that the projection extends less than 2 mm (See col. 2, lines 55-56). The tool includes a handle integral with the base (See figure 1, part 42). The language of claim 7 regarding marking instrument is refers to intended use, bearing little patentable weight on the claim. Kochis in view of Linet, further discloses a method using

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the dental tool discussed above by placing the projection adjacent a tooth face (See Kochis figure 10; col. 2, lines 65-68; col. 3, lines 1-2) and planar surface over immediate adjacent teeth (See Linet figure 10), moving the tool so the projection engages the tooth (See Kochis figure 10; col. 2, lines 65-68; col. 3, lines 1-2), and placing carbon between the projection and the tooth (See col. 3, lines 33-34; col. 2, lines 65-68; col. 3, lines 1-2).

8. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kochis (US 4,526,542), in view of Linet (2,634,501), and further in view of Littleton (US 3,006,011). Kochis, discussed above, fails to disclose a connecting means capable of allowing the handle to move relative to the base. Littleton discloses a handle with a universal joint (See col. 1, 12-16) in order to allow the base to be swiveled in all directions (See col. 2, lines 41-43). The language of claim 6 is analyzed as means plus function because it meets the 3-prong analysis: (1) the claim limitation must use the phrase "means for" or "step for"; (2) the "means for" or "step for" must be modified by functional language; and (3) the phrase "means for" or "step for" must not be modified by sufficient structure, material, or acts for achieving the specified function. (Supplement Examination Guidelines Regarding 35 U.S.C. 112, paragraph 6 (65 Federal Register 38510 June 21, 2000)). The disclosed connecting means, universal joint, is an equivalent of the Applicant's universal joint because the prior art element is a structural equivalent of the corresponding element disclosed in the specification. In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). Littleton is considered analogous art since it reasonably pertains to the problem in which Applicant is interested, facilitate

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manipulation a dental tool. Therefore it would be obvious to one of ordinary skill in the art to modify the tool of Kochis in view of Linet with the joint of Littleton in order to facilitate positioning of the base (See col. 2, lines 41-43). Littleton also teaches a means for removable connecting the base and handle (See col. 3, lines 1-3). The language of claim 8 is analyzed as means plus function. The disclosed removable connecting means, removal of the swivel element from the base socket, is an equivalent of the Applicant's slidably removable flange, since a person of ordinary skill in the art would have recognized the interchangeability of the element shown in the prior art for the corresponding element disclosed in the specification. *Caterpillar Inc. v. Deere & Co.*, 224 F.3d 1374, 56 USPQ2d 1305 (Fed. Cir. 2000). In both instances, the joint performs the same function, detaching the base from the handle for similar purposes, cleaning and disposal.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. US 2,224,264 (Jeanneret) discloses a dental cutting tool having a base and projection.

B. US 3,011,256 (Baum) discloses a dental cutting tool having a base and projection.

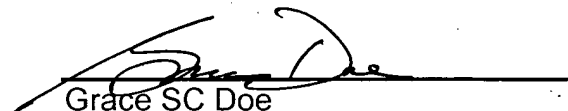
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- C. US 5,779,476 (Roetzer) disclose a dental abrading tool having a base and projection.
- D. US 6,390,814 (Gardiner) discloses a dental cutting tool having a base and projection.
- E. US 4,177,565 (Heasley) discloses a dental cutting tool having a base and projection.
- F. US 4,738,621 (Lowder) discloses a dental cutting tool having a base and projection.

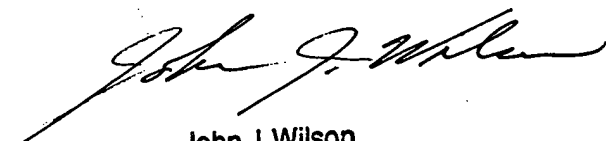
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Grace SC Doe whose telephone number is (571) 272-2831. The examiner can normally be reached on 8:00am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Grace SC Doe  
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